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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,826	08/13/2001	Michael J. Tierney	017516-003240US	9903

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EXAMINER

PRIDDY, MICHAEL B

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 02/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,826

Applicant(s)

TIERNEY ET AL.

Examiner

Michael B Priddy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,9 and 10 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7,8,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 7, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. (U.S. 5,814,038) in view of Chader et al. (U.S. 5,617,857). Jensen et al. teaches a robotic surgical tool 14 for use in a robotic surgical system having a processor which directs movement of a tool holder, the tool comprising: a probe 14 comprising an elongate shaft 100 having a proximal end and a distal end; a surgical end effector 120 disposed adjacent the distal end of the probe 14; an interface 132 disposed adjacent the proximal end of the probe 14 and comprising a portion of a drive system that is releasably coupleable with driving motors of the robotic surgical system. Hence Jensen et al. teaches all of the limitations of the present invention except circuitry mounted on the probe, the circuitry defining a signal for transmitting to the processor so as to indicate compatibility of the tool with the system; tool-type of the tool; or tool calibration offsets of the tool.

Chader et al. teaches an imaging system having interactive medical instruments. The system includes an instrument 12 which is provided with a memory module 36 which is programmed to include "a variety of initialization information including the serial

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number of the instrument, the instrument type or part number, the number of buttons on the instrument, the number of energy-emitting elements on the instrument, the local XYZ coordinates of the work portion or other reference location on the instrument, the unit direction vectors of the "transverse direction" of the instrument, the local XYZ coordinates for each of the energy-emitting elements, and the like" (column 6, lines 35-45). It would have been obvious to one of ordinary skill in the art at the time of the present invention to have included a memory module with on the probe 14 of Jensen et al. as taught by Chader et al. to assure "the system will be properly configured according to the attached instrument." (lines 59-60 of column 1)

Concerning the functional language of claim 11, "so as to indicate tool calibration offsets of the tool" it is noted that the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Since Chader et al. teaches a device having the circuitry capable of sending information such as tool identification data, it is believed this same circuitry is capable of sending information related to the calibration offsets of a tool.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. in view of Denen et al. (U.S. 5,400,267). Jensen et al. teaches a robotic surgical tool 14 for use in a robotic surgical system having a processor which directs movement of a tool holder, the tool comprising: a probe 14 comprising an elongate shaft 100 having a proximal end and a distal end; a surgical end effector 120 disposed adjacent the distal end of the probe 14; an interface 132 disposed adjacent the proximal end of

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the probe 14 and comprising a portion of a drive system that is releasably coupleable with driving motors of the robotic surgical system. Hence Jensen et al. teaches all of the limitations of the present invention except circuitry mounted on the probe, the circuitry comprising unique tool identifier data and indicating at least one of tool life and cumulative tool use by a measurement selected from the group consisting of calendar date, clock time, number of surgical procedures, number of times the tool has been coupled to the system, and number of end effector actuations.

Denon et al. teaches a circuitry 30 which, as disclosed in lines 47-68 of column 8, will be programmed with identification data that can be used by control module to identify equipment (tool). This ensures compatibility between the equipment and external power supply and control apparatus (lines 55-57 of column 8). It would have been obvious to one of ordinary skill in the art at the time of the present invention to provide circuitry as disclosed by Denon et al. to the system of Jensen et al.. so that the compatibility of a tool with the system would be automatically verified thus alleviating dependency on the limited knowledge of the surgeon or medical technician (lines 61-68 of column 1 and lines 1-5 of column 2).

Concerning the limitations of claim 12, Denon et al. discusses tool utilization limits and measurement thereof via a clock or calendar in lines 36-68 of column 10 and lines 1-54 of column 11.

Terminal Disclaimer

The terminal disclaimer filed on 12/12/2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,331,181 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2, 9 and 10 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 4, 7, 8, 11 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (703) 308-8620. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (703) 308-2582. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Michael B. Priddy
Michael B. Priddy
February 24, 2004